Technology: Optoelectronics

Thinnest SMD LED extant

Harvatek Corp., has an ultra low profile, high-brightness surface mount AlInGaP and InGaN based LED range with a 'new level of performance and size' for increasingly stringent portable and backlight applications. Available in all colours they measure 1.6mm long, 0.8mm wide and 0.25mm in height making the HT-F199 series the thinnest SMD LED available, it claims. The package thickness of HT-F199 represents a 28% reduction in package thickness over Harvatek existing HT-F195 series 0603 SMD LED. It is based on a lead frame architecture that provides designers uncompromised optical, thermal and electrical performance, meeting or exceeding that of a package with a PCB substrate.

www.harvatek.com

Quintessence awarded high-power mid-IR laser contract

Quintessence Photonics Corporation, a subsidiary of QPC Lasers, Inc., a designer and manufacturer of high-brightness, high-power semiconductor lasers, announced that it has won a US Government Contract to develop and deliver high-power mid-infrared lasers. The Phase III award is a follow on to previous development activity funded by the US Army which culminates in the delivery of semiconductor lasers which emit light in the Mid-IR wavelength regime.

www.qpc.cc

Texas first for LEDs

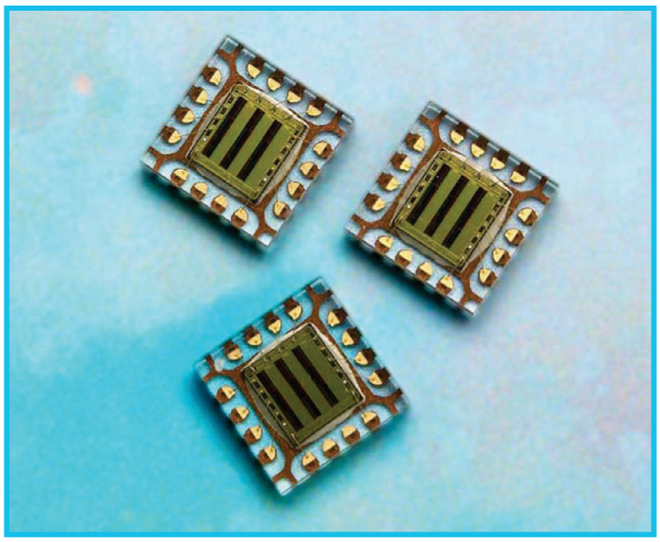
The University of Texas has chosen Daktronics to design and build the largest high-definition video display in collegiate sports for Darrell K Royal-Texas Memorial Stadium. The multimillion dollar display and control system will be installed and operational for the 2006 season opener against North Texas in September.

www.daktronics.com

Avago's first colour controller with integrated RGB photosensor

Avago Technologies has announced the industry's first colour controller with an integrated colour photosensor for backlighting LCDs for a variety of portable display devices. Avago's new ADJD-E622 is the industry's first RGB (red, green, blue) analog-output colour sensor that meets the specifications of the Automobile Electronics Council AEC-Q100 Stress Test Qualification for Integrated Circuits.

For more details, visit:
www.avagotech.com/led



USAF LED Watchdog

LED lighting solutions provider Cyberlux Corp., has received the next field use system order for its Watch Dog Portable Covert Illumination System from the USAF.

WatchDog system is one-of-a-kind in its capabilities and the only product that meets or exceeds the USAF Battlelab's portable covert illumination system requirements.

Watchdog is a solid-state LED security lighting system and provides security lighting for an exterior boundary of 300×300 feet with either visible light or covert infrared light that is compatible with night-vision goggles (NVGs). It was designed to protect military assets on the ground, such as an airplane, by creating a "lightless" zone around the asset while illuminating the surrounding protection boundary. In covert illumination mode, the system increases the visibility of NVGs by almost 4-fold. The BrightEye PortableVisible Illumination System is a high-powered visible lighting system that provides over 600 feet of perimeter security lighting and is a portable solution for high intensity lighting applications.

Cyberlux was originally selected in a competitive review process that included 25 proposals from other companies to develop a lightweight, portable lighting system for the USAF. The system weighs less than 50lbs, including batteries, can be quickly deployed, and with highly efficient LED technology, the system can provide lighting for several days with a single battery charge.

For more details, visit:
www.cyberlux.com

LED light engine

NeoPac Optoelectronics launched a range of system-in-package, ultra-high-power, point-light-source RGB-based LEDs component for all-purpose colour lighting requirements. The Hsinchu, Taiwan, based company integrates its proprietary first-level LED packaging and second-level high-efficiency heatsink into a SiP component, the NeoPac 'Light Engine'.

This gives high-brightness in mixing white (6W), red, green, and blue in single colour as well as mixed colours. The high-density RGB multi-chip module attaches on the flatten end of a micro heatpipe that is surrounded by stacked aluminium dissipation fins, each at 40mm in diameter.

Also, NeoPac Lighting made an OEM deal with LED manufacturer Cotco International to supply ultra-high-power white LED packages for NeoPac's range of LED lighting products.

For more details, visit:
www.neopac-lighting.com